

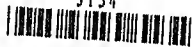
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RURAL HOUSEHOLD INDUSTRIES IN
UTTAR PRADESH

T.S. Papola
(1980)

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The household industry has always been an important source of livelihood for rural population, next only to agriculture. Its importance has of late been realised afresh both in academic and policy making circles on account of serious doubts raised against the rural-urban population transfer model of economic transformation. It has been found that the phenomenon of rural unemployment manifests itself mostly in terms of surplus labour rather than surplus and permanently transferable workers. On the other hand, the capacity of the economics of urban areas is too limited to absorb the natural growth of their labour force as well as in-migrants from rural areas. The household industry is, therefore, considered a suitable activity to provide employment to the rural under-employed and to supplement low agricultural incomes without involving a transfer of population to urban areas.

There is a general lack of information on rural household industries which could be used for analysing their potential for employment and income generation and help in policy making in this regard. The present note, primarily based on some useful data collected by the Directorate of Economics and Statistics of the U.P. Government in a survey conducted during 1968-69, describes the characteristics of rural household industries in U.P., in terms of their product structure, geographical spread and income and employment generation and attempts to assess their relative potential, industry and regionwise, with the help of certain indicators of technology and performance. Even though the information used is rather dated, the implications drawn from the analysis could be considered generally valid.

I : The Magnitude

According to the Census 1961, there were over 15 lakh workers engaged in the household industry in the rural sector in the State, of which 41 per cent were located in the 15 districts comprising the Eastern Uttar Pradesh; 38 per cent in the 18 districts of Western U.P.; 12 per cent in the Central Region (nine districts); 5 per cent in the four Bundelkhand districts and 3 per cent in the Hill Region consisting of 8 districts. The reported employment in the household industry in the rural areas in 1971 is even less than half of the 1961 figure, which can be explained by the definitional changes in the 'worker'

category in 1971 Census. The regionwise relative distribution of employment among various regions, however, is more or less the same in 1971 as in 1961. In 1971, the total of 7.36 lakh rural household industry workers were distributed among the Eastern, Western, Central, Bundelkhand and Hill Regions in the proportions of 43, 36, 14, 5 and 3 per cent respectively.

Thus while the Census figures do give us a broad order of magnitudes and an idea of relative distribution among different regions and districts of the State, they do not enable us to gauge the trends and changes in employment over the decade, because of the definitional changes. Further, a survey conducted by the Directorate of Economics and Statistics (DES), Government of U.P. during 1968-69 estimated a total of 18.79 lakh units in household industry in the rural areas of the State, which is violently at variance with the Census 1971 figure of 7.36 lakh persons engaged in this sector. Even if at least one person is assumed as engaged in a unit, the total employment in this sector should be at least 18.79 lakhs. However, it may be possible that production in a large number of units is being carried out by persons whose main activity is something different from household industry. Some of the characteristics of these units as reported in the DES Survey, particularly mandays engaged per year in a unit, do suggest the possibility that the rural household industry is carried out, to a large extent, as a subsidiary activity with a view to supplementing the meagre income generated by the main activity. To the extent this is true, the rural household industry, could be considered an important and appropriate way of solving the under-employment and seasonal unemployment problem while the non-household industry for employing such unemployed persons in the rural areas who are available for work for the entire or most part of the year.

II : Regional Distribution

The total of 1878650 units reported in the DES Survey is distributed among the various regions quite unevenly - more or less in the same proportions as suggested by the Census figures. Forty five per cent of these units are to be found in Eastern U.P. alone and 39 per cent in Western,

12 per cent in Central, 3 per cent in Bundelkhand and less than one per cent in the Hill Region.* Although the Western Region had only 39 per cent units, its share in total productive capital was 53 per cent, while Eastern Region with 45 per cent units, had only 35 per cent of total productive capital. Therefore, in terms of productive capital the units in Western Region have twice the average size of those in the Eastern Region. The average productive capital per unit is around Rs. 900/- for the State as a whole, while it is Rs. 676/- for units in Eastern Region, Rs. 1204/- in Western Region and Rs. 658/-, Rs. 907/-, and Rs. 492/- in Central, Hill and Bundelkhand Regions respectively.

The total mandays engaged in these units are, however, distributed among regions more or less in the same proportions as the number of units. Thus of the 41.19 lakh mandays of employment in all the units in the State, 45 per cent are found in Eastern, 39 per cent in Western, 13 per cent in Central, 3 per cent in Bundelkhand and less than one per cent in the Hill Region. The average mandays per unit work out as 219 for the State as a whole, and averages for both Eastern and Western Regions are also 219. Units in Central Region have slightly higher (224) and Bundelkhand (215) and Hills (192) somewhat lower than the State average. The inter-regional differences on this count are thus really not significant.

The output contribution of the regions is, however, more in line with the productive capital employed rather than with their share in the number of units or mandays employed. Thus of the total value of output of the order of over Rs. 3.31 crores Western Region alone contributes over 59 per cent, and Eastern, Central, Bundelkhand and Hill regions, 29, 9, 1 and less than one per cent respectively. It may be noted that the output contribution of Western Region is even greater than its share in productive capital; while in all other regions it is lower, except in Central Region where both the shares are more or less the same. There are significant variations in the size of units in terms of output : as against the State average of Rs. 1764 as value of output per unit, the figures for Western, Central, Eastern, Bundelkhand and Hill regions are Rs. 2686, 1346, 1140, 919 and 1572 respectively.

* It may, however, be noted that the survey did not cover three Hill districts : Uttarkashi, Chamoli and Pithoragarh.

The Western Region also contributes over one-half (52.74 per cent) of the total value added generated in the rural household industries in U.P. (over 1.23 crores). It may however, be noted that value added to output ratio turns out to be less favourable in Western Region than in the other regions. The highest of this ratio is shown by Hills and Bundelkhand at 48 per cent, followed by Central Region at 46 per cent, and Eastern Region at 42 per cent, while the Western Region shows only a 33 per cent. The State average is 37 per cent.

III : Industry-wise Distribution

Over one-half (52 per cent) of the rural household industry units are in the industry group Food and Food Products; and the two regions, Eastern and Western together claim about 87 per cent of the units of this industry, and another 12 per cent is accounted for by the Central Region. The other industries which have a sizeable number of units in the State are : Wood and Wood Products (11 per cent); Cotton Textiles (11 per cent), Miscellaneous Textiles (7 per cent), and Non-metallic Mineral Products (6 per cent) - all with over one lakh units; and Basic Metals and Metal Products (4 per cent), Leather and Leather Products (3 per cent) and Miscellaneous manufactures (5 per cent), each with over 50,000 units in the State. Most of these industries have a major concentration in the Eastern and Western Regions, the two together having over three-fourths of the total units in the State in practically all of them. The Central Region, however, has at least a 10 per cent share of total units in the State in most of the industry groups, more particularly in Leather and Leather Products and Miscellaneous Textiles; but the other two regions, Bundelkhand and Hills, have less than proportionate share in most industries, even after taking account of their smaller size in comparison to the other regions.

Food Products constitute the largest industry in East, West and the Central Regions, while in Bundelkhand Wood Products have such a place and in Hills textiles other than Cotton and Silk (Miscellaneous textile products group). In the Eastern Region, Cotton Textiles, Miscellaneous Textiles, Wood and Wood Products and Non-metallic Mineral Products are the other groups of rural household industries which have at least 50,000 units, out of a total of 851.64 thousand units in that region. In the Central Region Cotton Textiles, Wood

and Wood Products and Miscellaneous Textiles are the industries with sizeable number of units, besides Food Products. The structure of rural household units in Bundelkhand is more diversified among industry groups, where all the 10 industries except Transport Equipment have at least 5 per cent of the total units in the region; still Wood Products together with Food products make up about 53 per cent of the total units. In the Western Region, Cotton Textiles and Leather and Leather products are the other two major industries. The Hill Region's major industry is Miscellaneous textiles, followed by metal products, food products, wood and wood products, all the four together making 88 per cent of the total units in the region.

IV : Size of Units : Productive Capital, Mandays and Output

The size of productive capital employed per unit varies significantly among the industry groups. Cotton Textiles and Food Products units have the largest capital per unit at Rs. 1348 and Rs. 1024 respectively, followed by Silk Textiles at Rs. 830 per unit. At the other end, Wood and Wood Products units have, on an average, a capital of Rs. 380, Transport Equipment units Rs. 400, Leather and Leather products Rs. 468, and Non-metallic mineral products Rs. 500. It looks that the product line and technology differs significantly among regions even in the same industry. For example, food products units on an average, have productive capital of Rs. 2954 in the Hill Region as against Rs. 1245 in Western Region and Rs. 651 in Bundelkhand. Similarly average amount of productive capital employed in the Cotton Textile units is Rs. 2209 in Western Region as against Rs. 725 in the Eastern Region and Rs. 303 in Bundelkhand. The Inter-regional variations in productive capital per unit are less marked in wood products, basic metals and metal products and non-metallic mineral products, but significantly high in miscellaneous textiles and leather products units.

The figures of mandays employed per unit suggest that except Cotton Textiles, Silk Textiles and Transport Equipment, units in no industry, on an average, generate employment equivalent to a man-year. In the above three industries a unit generates employment of 636, 683 and 447 mandays in a year, while in the rest of them the figure is below 300 mandays : Food Products units have the lowest figure of 116, followed by Basic Metals and Metal products (183), Wood Products (198) and Miscellaneous manufacturing (208). Inter-regional variations

in mandays employed per unit are not very marked except in cases of Leather products where the figure ranges between 112 in Eastern U.P. and 337 in the Hills; Non-metallic Mineral products where it ranges between 280 in the Eastern Region and 984 in the Hill Region; and, Transport equipment where it ranges between 315 in Bundelkhand and 808 in the Western Region.

In terms of output, the Cotton Textile units generate the largest value (average Rs.4603) followed by Silk Textiles (Rs.2302), Transport Equipment (Rs.1461) and Miscellaneous Manufacture (Rs.1140). Units in the rest of the industries have less than Rs. 1000 worth of output in a year : Wood Products units showing the lowest at Rs. 753. Here again, regional variations are very marked : Food Products units, on average, produce output worth Rs.6292 in the Hill Region and worth Rs.1096 in Bundelkhand; Cotton Textile units produce output worth Rs.7755 in the Western Region and worth Rs.1362 and Rs. 410 in the Bundelkhand and Hill Regions; an average Leather and Leather products unit produced output of the value of Rs.2917. in the Western Region, but only Rs.513 worth in the Eastern Region.

V : Some Operational Indicators

Let us now look at some of the technical and operational ratios indicating the technology and performance of these units. On an average, the rural household industry in the State has an investment of Rs. 3.99 productive capital per manday of employment generated : the highest capital intensity is to be found in the Western Region with Rs. 5.50 per manday. The figures for Hill, Eastern, Central and Bundelkhand regions being Rs. 4.72, 3.09, 2.93 and 2.29 respectively. Value of output generated per manday is Rs. 8 for the State as a whole, Rs.12.27 for Western, Rs. 8.17 for Hill, Rs. 6.00 for Bundelkhand, Rs. 5.21 for Eastern and Rs. 4.29 for the Central Region. Of the output of Rs. 8 per manday, about Rs.5 works out to be the paid out cost for material, fuel etc. and Rs. 3.00 is the value added per manday. It does not vary as widely as certain other variables like output, among regions : the highest, Rs. 4.08 being in the Western and the lowest Rs. 2.17 in the Eastern region. Output/productive capital ratio stands at 2.01 for the State with small regional variations. Value added/capital ratio stood at 0.75 for the State, the highest 0.94 being in the Central Region followed by Bundelkhand (0.90), Hills (0.84), Western (0.74) and Eastern region (0.70).

It would be useful to look at these characteristics in the case of individual industries. Against the all-industry average of Rs.3.99 of productive capital per manday for the State's rural household industrial sector, the Food products industry has a dis-proportionately high figure: its productive capital requirements are Rs.8.79 per manday. On the other hand, the requirement is below Rs.2 per manday in all other industries except metal products, miscellaneous manufacture and cotton textiles where it is Rs.3.47, Rs.4.36 and Rs.2.12 respectively. Inter-regional variations in an industry are not very marked except in Leather and Leather Products where the figures vary between Rs.1.10 per manday in Eastern U.P. to 2.22 in Central and Western Region, and Non-metallic Mineral Products where the lowest figure is for Hills at Rs.0.23 and highest for Western region at Rs.2.67. Labour productivity in terms of value of output per manday is the highest in the Food Products at Rs.14.86, followed by Leather Products at Rs.7.77 and Cotton Textiles at Rs.7.24; Non-metallic Mineral Products have the lowest labour productivity at Rs.2.86 per manday. The variations between regions are highly marked in Food Products : Rs.21.57 in Hill and Rs.20.98 in Western region, Rs.11.35 in Eastern, Rs.8.94 in Central and Rs.5.85 in Bundelkhand region. Similar variations are to be found in Cotton Textiles and Leather Products.

In terms of value added per manday, again Food products show the highest productivity at Rs.4.00. The next best are Basic metals and Metal products and Miscellaneous Manufactures at Rs.3.27 followed by Cotton Textiles at Rs.2.84, Leather and Leather products at Rs.2.79 and Wood products at Rs.2.56. Inter-regional variations in value added per manday are less marked than those in output per manday, although they are significantly high in Food products, Cotton Textiles, Leather products, Transport Equipment and Miscellaneous manufactures.

The highest value added per unit of capital is obtained in Transport Equipment: the value added to capital ratio in this industry being 2.54. Leather and Leather products (1.57), Cotton textiles (1.34), Wood products (1.33) and Miscellaneous textiles (1.29) are other industries with the ratio higher than 1. Food products, which have consistently shown better performance in terms of labour productivity shows the lowest capital productivity at 0.45. This is primarily because of high capital intensity and low labour absorption per unit of capital and output observed in this industry.

VI : Performance and Potential of Individual Industries

In the household sector, value added could be taken as primarily consisting of compensation for labour, as the amount of capital involved is low and therefore payment or compensation on this account may constitute an insignificant amount. Thus the value added constitutes the household industry's contribution to the household income. The most important figures to look for to assess the relative roles that various industries in this sector play in the removal of unemployment and under-employment and in augmentation of meagre incomes of the rural households are: value added per manday and number of mandays a household industrial unit engages. Of course, side by side, one had also to see the amount of capital required to generate a manday of employment and a certain value added.

As seen earlier, Food products has the highest value added per manday (Rs.4.00), but an average unit in this industry generates only 116 mandays in a year, the lowest in any industry analysed here. However, at present over half of the rural household industrial units are in this industry and, therefore, in spite of low employment potential per unit as well as per unit of capital, its overall employment potential cannot be ignored. It should, however, be noted that this industry has one of the highest capital requirements (Rs.8.79) to generate one manday of employment; and it has also the lowest amount of value added per unit of capital, and, therefore, the total capital requirements for a programme of generating more mandays of employment and higher incomes to the household through this industry would be sizeable. The industry seems to have, however, a relative advantage in the Hill Region, where although the capital intensity is one of the highest (Rs.10.13) per manday, the value added (Rs.8.10) per manday and employment per unit (292 mandays), as well as the value added to capital ratio (0.84) are reasonably high. To a lesser extent, this applies to the Central Region also.

The next industry which has a high value added per manday is basic metals and metal products. It generates an income of Rs.3.27 per manday of employment. On an average a unit in this industry generates employment of only 183 mandays per year; capital requirements per day of employment are Rs.3.47, higher than most of the other industries and its capital efficiency is reasonably high the ratio being 0.94 as against the all industry average of 0.75. The Metal products units seem to be already doing quite well in the Western Region;

each unit, on an average providing employment of 248 mandays in a year; generating a value added of Rs.4.06 per manday, the highest in any region; having a not too high capital requirement (Rs.3.46 as against the State average of Rs.3.47 per manday), and showing a value added to capital ratio of 1.17 as against the State average of 0.94. The Western Region has 28 per cent of the total rural household units in this industry. On the other hand, in Eastern Region, where 51 per cent of units of these industries are located, a unit on an average provides employment for 154 mandays in a year, generates value added of Rs.2.84 only; requires a capital of Rs.3.67 per manday and generates only 77 paise of income for a capital investment of one rupee.

Cotton textiles is another industry (leaving aside the Miscellaneous Manufactures) with a relatively high value added per manday (Rs.2.84). An average unit in this industry generates 636 days of employment, requires Rs.2.12 worth of capital to employ one person for a day and adds value of Rs.1.34 for one rupee of capital investment. The Western region which has 45 per cent units of this industry has the highest figure of value added (Rs.4.39) per manday, and also a relatively high employment per unit (647 mandays per year); but the units there seem highly capital intensive: the capital requirements per manday are Rs.3.42 and value added to capital ratio at Rs.1.29 is lower than that in Central and Eastern Region. The Eastern region, which has 52 per cent of State's units in this industry, on the other hand has units which provide employment on an average for 658 mandays per year, generate a value added of only Rs.1.56 per manday, though its capital productivity at 1.42 is better than that of Western U.P. The Central Region has very low capital requirements (Rs.0.57) per manday, because of which, despite a low value added figure (Rs.1.45) per manday, the Cotton Textiles units in this region show a high capital productivity (2.54).

The industry with the next highest value added per manday is Leather and Leather Products. It generates an income of Rs.3.27 per manday of employment; an average unit in this industry generates 264 mandays of employment per year, requires Rs.1.78 worth of capital per manday and generates an income of Rs.1.57 for a capital investment of one rupee. The industry looks very much suitable for programme of augmenting household incomes and tackling the under-employment problem. Its performance and potential for this programmes, however, differs among regions. In the Western region a unit of this industry on an average provides more or less full employment

to a person throughout the year; generates an income of Rs.3.45 per manday, requires a capital of Rs.1.84 of capital for employing one person for a day and generates Rs1.87 of income for one rupee of capital. On the other hand, in the Eastern Region these units on an average provide employment of only 112 mandays in a year, generate a value added of only 1.19 per manday; require Rs.1.10 of capital per manday and generate 1.07 rupee worth of income for a rupee of capital. The Central Region comes somewhere in the middle of these two regions in terms of the performance of the Leather units. These three regions have about 93 per cent of all the rural household units in this industry in the State.

Wood Products, which is another sizeable industry in all the regions generates a value added of Rs.2.56 per manday; its units on an average employ 198 mandays; requires a capital of Rs.1.92 to generate one manday of employment and yields Rs.1.33 of value added per one rupee of investment. In terms of value added per manday, the performance of units in different regions is not highly different, nor does employment potential seem to differ among regions. As compared to other regions, the units in the Hill region, however show a higher capital requirements and lower value added per manday, lower employment potential per unit and also a significantly lower capital productivity. The overall unfavourable performance of Hill region's units in this industry may need to be looked into particularly because this may be one of those few industries to which the region can look as an instrument of employment and income generation.

Let us now look at some other industries which have a low value added per manday, but has certain other favourable characteristics. Let us first take the size of units providing reasonably high employment potential. On this criterion Transport Equipment, with an average employment of 447 mandays per year per unit seems a promising case. Its labour productivity is of a middle order (Rs.2.27 value added per manday); capital requirement per manday is the lowest (Rs.0.89) and capital productivity highest (2.54) among all the industry groups. It has over 10,000 household units in the rural areas of the State, two-thirds of which are to be found in the Eastern and another 22 per cent in the Western region. The Western region units have the highest average size in terms of employment, they engage on an average 808 mandays per year, their capital-labour ratio is around average, but here, capital and labour productivity is lowest among the region. With the same capital requirements per unit of labour, its units in

Eastern Region show much higher capital and labour productivity. The productivity -- capital as well as labour -- is the highest in Hill region, but capital requirements there are also three times higher than the average.

Non-metallic Mineral Products is another industry in which the rural household units seem to be capable of generating employment equivalent to almost one man year. Labour productivity, however, is low (Rs.1.59 per manday of value added) and so is capital productivity. But its capital requirements per unit of employment are also low. The industry seems to have particular advantage in the Central region where with a relatively low capital requirements per manday (Rs.0.99), it generates a value added of Rs.2.04 per manday which works out to be Rs.2.07 per one rupee of capital employed.

VII : Summary and Concluding Observations

Even according to the 1971 Census, where the definition of 'workers by activity' introduced a significant downward bias in case of the household sector employment estimates, the household industries contributed 37 per cent of the total employment in the manufacturing sector in the State. There, however, seems a large segment of 'secondary' workers in this sector, engaging themselves while without work in their main activity to supplement the household income. It is probably this phenomenon which explains the figure of household industrial units estimated in DES, 1968-69 Survey being two and a half times larger than the reported number of workers in 1971 Census. Once we take account of this fact, the household industry assumes a much greater importance in the rural areas of the State.

The data thrown up by the DES Survey reveal the following major characteristics of the rural household industrial units in U.P.:

1. The 15 Eastern districts account for 45 per cent of the total units; while another 39 per cent is claimed by the 18 districts constituting Western Region. Eight districts of Central U.P. have 12 per cent units. The rest 4 per cent of units are spread over 12 districts in Bundelkhand and Hill Regions.
2. The share of various regions in mandays of employment is more or less the same as in the number of units, but the Western Region has a dis-proportionately large share in productive capital; and therefore the Western Region

units are relatively large in terms of average capital employed. The output contribution of each region is more in line with the shares in productive capital than in mandays employed.

3. Food Products is the largest industry, not only in the State as a whole but also in the three major regions: Eastern, Western and Central. Wood Products have the pride of place in Bundelkhand and 'Miscellaneous Textiles' in the Hill Region. Wood and Wood Products and Cotton Textiles are the other major industries in the household sector in the rural U.P.
4. The average size of units is the largest in Cotton Textiles, Food Products and Silk Textiles in terms of productive capital; Cotton Textiles, Silk Textiles and Transport Equipment in terms of mandays employed, as well as in terms of value of output. Food products units have the lowest average figure of mandays employed.
5. Capital intensity in terms of the productive capital employed per mandays of employment created is highest at Rs.5.50 in the Western Region, the State average being Rs.3.99. Among industries, Food Products units show a dis-proportionately high figure at 8.79. The other industries with higher than average capital intensity are Metal Products and Miscellaneous Manufactures. All the other seven industry groups require less than Rs.2 for a manday of employment: the Transport Equipment requires the lowest, Rs.0.89.
6. The average value of output per manday for the whole State is estimated at Rs.8 : it is Rs.12.27 in the Western Region and Rs.5.21 in the Eastern and Rs.4.29 in the Central Region. Food products group has the highest figure at Rs.14.86, followed at a half way distance by Leather Products and Cotton Textiles; the lowest figure at Rs.2.86 per manday is shown by Non-metallic Mineral Products.
7. In terms of value added per manday, again the Food products group shows highest productivity at Rs.4.00, followed by Basic Metals and Metal products, Cotton Textiles, Leather Products, Wood Products all having a figure of at least Rs.2.50. The regional variations are not very wide: the highest being Rs.4.08 in Western and lowest Rs.2.17 in the Eastern Region.

8. Capital productivity, in terms of value added per rupee of capital, is Rs.0.75 for the State as a whole. The highest, Rs.0.95 is shown by Central Region and both Western and Eastern Regions are slightly below average. Among industries, Transport Equipment has the highest capital productivity, Rs.2.54. Leather Products, Cotton Textiles, Wood Products and Miscellaneous Textiles are other industries with a figure of above Rs.1.00. Food Products show the lowest capital productivity at Rs.0.45.
9. From the viewpoint of the role the household industrial units play in the rural economy, value added per unit and mandays employed constitute the crucial variable, with the proviso that the capital requirements for generating a high value of each of these variables are not dis-proportionately large. On these criteria there are only a few industries which stand out with favourable characteristics. The largest industry, Food Products has the highest value added per manday, but its other characteristics, employment per unit, capital intensity as well as capital productivity are unfavourable. The next largest industry, Wood products, has labour and capital productivity, and capital intensity of an average order, but its employment potential per household unit is low. Cotton Textiles, the third largest industry, has a relatively high employment potential, per unit of operation and per unit of capital, and its labour and capital productivity is also above average. These three industries together claim about three-fourths of the total rural household units in the State. Therefore, it needs to be examined in their cases as to how the unfavourable indicators are improved: greater employment per unit of operation as well as per unit of capital, in the Food products units; increasing productivity -- both capital and labour in case of Wood products. The Cotton Textile units, however, provide a suitable case for expansion even with the existing performance levels. Similar characteristics are found in the Leather products, among the minor industries.
10. On the other hand there are certain relatively smaller industries with good employment potential per unit of operation as well as per unit of capital, as well as reasonably high capital productivity, but have low labour productivity. An outstanding example is Transport equipment with lowest capital intensity, highest value added per unit of capital and relatively high employment per

unit of operation, but lower than average value added per manday. Miscellaneous Textiles (Woolens etc.), Silk Textiles, Non-metallic Mineral Products are the other industries in this category.

11. Then there are industries which have relatively high value added per manday, but a high capital intensity, low capital productivity and low employment per unit. They assume importance more from the income supplementing viewpoint than the employment generation. Examples of this type of metal and metal products and, miscellaneous manufacturing, both of which have value added per manday lower only to Food Products.

In general, the household industries seem to be performing quite useful role in providing employment to the underemployed and supplementing the incomes of the rural household. Units in all the household industry, except Food Products, on an average, provide a minimum employment, equivalent to six man months and except in Silk Textiles and Non-metallic Mineral products generate at least Rs.2 income per manday of work. The need, therefore, is that of making them more effective in the performance of their traditional role, that of utilising the surplus labour time available with rural workers with a view to supplementing the household incomes. There does not seem to be a unique way of effecting this improvement for different industries and areas, as the above description of the characteristics of these industries reveals. It is, therefore, worthwhile to study their roles, performance and potential at the level of individual industries and areas.

TABLE - I

Region-wise Survey of Household Industries in U.P. (Rural)

Sl. No.	Region	Total no. of Units (000's)	Total productive capital (Rs. Lacs)	Total Mandays (Lacs)	Total output (Rs. Lacs)	Total Value added (Rs. Lacs)	Total no. of Individual Units in each Region (In 000's)			
							Food	Cotton	Silk	Textiles
1	2	3	4	5	6	7	Code 20	23	26	26
1.	Eastern	851.64 (45.34)	5755.76 (34.98)	1864.93 (45.29)	9709.48 (29.30)	4040.58 (32.75)	443.85 (45.38)	52.12 (42.17)	86.61 (15.80)	5.26 (96.86)
2.	Central	232.15 (12.35)	1528.65 (9.29)	521.16 (12.65)	3125.15 (9.43)	1442.43 (11.69)	114.38 (11.69)	49.27 (11.32)	23.23 (10.01)	- (-)
3.	Bundel- khand	48.26 (2.57)	237.56 (1.44)	103.53 (2.51)	443.64 (1.34)	214.90 (1.74)	12.04 (1.23)	24.95 (1.18)	2.42 (5.01)	- (-)
4.	Western	728.99 (38.80)	8774.39 (53.32)	1595.36 (38.73)	19578.30 (59.09)	6507.19 (52.74)	405.32 (41.43)	55.60 (45.19)	92.70 (12.72)	0.17 (3.14)
5.	Hill	17.61 (0.94)	159.73 (0.97)	33.37 (0.82)	276.88 (0.84)	133.63 (1.08)	2.69 (0.27)	15.28 (0.14)	0.28 (1.59)	- (-)
U.P. Total		1878.65 (100.00)	16456.09 (100.00)	4118.90 (100.00)	33133.45 (100.00)	12338.73 (100.00)	978.28 (100.00)	52.06 (100.00)	205.14 (100.00)	5.43 (100.00)

NB : Figures in brackets indicate percentage.

Source: Survey of House-hold Industries of U.P., 1968-69 by the Directorate of Economics & Statistics, U.P., Lucknow.

Region-wise Survey of Household Industries in U.P. (Rural)

Sl. No.	Region	Total number of individual units in each Region (In 000's)									
		Misc. Textiles	Wood product mfg.	Leather products	Leather	Non-metallic minerals	Basic metals and equipments	Transport	Misc. mfg. industries		
		Code 27	28	31	34	36	38	39			
1	2	11	12	13	14	15	16	17			
1.	Eastern	66.69 (50.70)	81.43 (39.05)	18.60 (31.87)	59.49 (53.04)	39.21 (51.21)	4.60 (67.28)	6.91 (47.30)	0.81 (43.69)	5.13 (47.30)	
2.	Central	21.19 (16.11)	28.81 (13.81)	12.25 (20.99)	13.28 (11.84)	9.83 (12.84)	0.76 (7.40)	0.32 (9.12)	8.42 (3.62)		
3.	Bundel- khand	4.45 (3.38)	13.52 (6.48)	28.01 (7.23)	8.74 (4.95)	5.55 (11.50)	2.96 (3.87)	0.09 (0.88)	3.02 (3.27)		
4.	Western	31.57 (24.00)	82.60 (39.60)	22.67 (38.85)	33.73 (30.09)	21.47 (28.04)	2.29 (22.30)	0.31 (39.49)	36.47 (5.00)		
5.	Hill	7.65 (5.81)	2.22 (1.06)	12.60 (1.06)	3.52 (0.08)	0.09 (0.08)	3.09 (4.04)	0.22 (2.14)	1.24 (0.82)		
U.P. Total:		131.55 (100.00)	208.58 (100.00)	58.36 (100.00)	112.14 (100.00)	76.56 (100.00)	10.27 (100.00)	92.36 (100.00)	4.91 (100.00)		

NB: Figures in brackets indicate percentage.

Source : Survey of House-hold Industries of U.P., 1968-69 by the Directorate of Economics and Statistics, U.P., Lucknow.

TABLE - II

Employment in House-hold Industries, U.P. Districts (Rural Areas) 1961 & 1971

Eastern Region	Household Workers	Central Region	Household Workers	Bundelkhand Region	Household Workers
Districts	1961	1971	Districts	1961	1971
(1)		(2)		(3)	
1. Allahabad	57452	35415	1. Barabanki	36172	19596
2. Azamgarh	72306	31750	2. Fatehpur	28193	11568
3. Bahraich	18552	4499	3. Faeroi	22375	11187
4. Ballia	48587	17747	4. Jaunpur	25807	11665
5. Basti	48800	25172	5. Lucknow	12349	7148
6. Deoria	25373	13224	6. Raebareli	25725	12971
7. Faizabad	34189	18382	7. Sitapur	20679	14275
8. Ghazipur	39115	18992	8. Unnao	21291	12504
9. Gonda	27530	12812			
10. Gorakhpur	38244	16211			
11. Jaunpur	38803	16262			
12. Mirzapur	34490	16305			
13. Pratapgarh	30545	14178			
14. Sultanpur	33577	16550			
15. Varanasi	70139	57443			
			1. Banda	22449	9915
			2. Hamirpur	25948	9324
			3. Jalaun	10028	4295
			4. Jhansi	22497	9742
			5. Lalitpur	-	-

Total

(Eastern)	617702	314947	(Central)	192591	100914	(B. Khand)	80922	33276
	(41.01)	(42.76)		(12.79)	(13.70)		(5.37)	(4.52)

Note : Figures in brackets represent the percentage share of each region out of the whole of U.P.

Source: Census of India 1961 & 1971

Employment in House-hold Industries, U.P. Districts (Rural Areas) 1961 & 1971

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TABLE - II (Contd.)

Western Region		Hill Region		Household Workers	
Districts	1961	Districts	1971	1961	1971
(4)		(5)			
1. Agra	22496	1. Almora	18531	6582	2977
2. Aligarh	41768	2. Pithoragarh	18051	5323	2554
3. Bijnor	45784	3. Dehradun	23811	10893	3391
4. Badaun	16707	4. Garhwal	5690	5067	1880
5. Bareilly	16593	5. Chamoli	6259	5085	2492
6. Bulandshahr	44441	6. Nainital	20435	12335	3273
7. Etah	19456	7. Tehri Garhwal	8075	5265	2152
8. Etawah	14416	8. Uttar Kashi	5543	2678	644
9. Farukhabad	19566		10408		
10. Mainpuri	18483		10117		
11. Mathura	23406		14911		
12. Meerut	126764		53305		
13. Moradabad	29768		16597		
14. Muzaffarnagar	52451		24895		
15. Rampur	5794		2443		
16. Pilibhit	7213		2798		
17. Shahjahanpur	39384		21602		
18. Shahjahanpur	17328		4562		
Total					
(Western)	561793	(Hill)	268033	53228	19363
	(37.30)		(36.39)	(3.53)	(2.63)
All Districts :	1506236		736533		

Note : Figures in brackets represent the percentage share of each region out of the whole U.P.

Source : Census of India 1961 & 1971

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TABLE - III

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Rural House-hold Industry

Productive Capital, Mandays and Value of Output per Unit

(a) Productive Capital:

Sl. No.	Region	All Industries	Food Stuffs	Cotton Textiles	Silk Textiles	Misc. Textiles	Wood Product mfg.
1.	2.	3.	4.	5.	6.	7.	8.
1.	Eastern	675.84	838.37	724.63	853.11	534.17	320.21
2.	Central	658.43	953.73	303.45	-	265.50	315.03
3.	Bundelkhand	492.25	651.02	766.87	-	612.43	352.80
4.	Western	1203.64	1244.86	2209.00	222.55	543.54	464.18
5.	Hill	907.04	2954.00	550.17	-	387.11	446.61
6.	U.P.	875.95	1023.70	1348.00	830.04	487.24	379.96

(b) Mandays per Unit:

1.	Eastern	218.99	105.74	657.65	639.28	366.32	203.08
2.	Central	224.49	154.07	531.96	-	223.00	201.89
3.	Bundelkhand	214.53	187.20	513.28	-	177.66	202.30
4.	Western	218.85	114.25	646.70	479.09	185.63	190.79
5.	Hill	192.33	291.68	27.67	-	149.62	157.30
6.	U.P.	219.25	116.43	635.91	682.59	280.89	197.51

(c) Value of Output per Unit:

1.	Eastern	1140.09	1200.67	2186.98	2182.18	1036.07	653.30
2.	Central	1346.18	1377.28	1561.63	-	639.97	854.00
3.	Bundelkhand	919.27	1096.12	1793.46	-	632.76	637.21
4.	Western	2385.67	2397.42	7754.78	5950.87	582.64	857.16
5.	Hill	1572.29	6292.15	410.19	-	514.86	582.56
6.	U.P.	1763.68	1729.83	4602.55	2302.14	821.19	752.93

TABLE III (contd.)

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Rural House-hold Industry

Productive Capital, Mandays and Value of Output per Unit

(a) Productive Capital:

Sl. No.	Region	Leather & leather products	Non-metallic minerals	Basic metals & its pdts.	Transport equipment	Misc. mfg. industries
1	2	9	10	11	12	13
1.	Eastern	206.56	379.31	565.04	293.69	549.32
2.	Central	702.33	286.15	526.71	339.01	497.05
3.	Bundelkhand	418.50	426.67	456.00	290.14	315.06
4.	Western	557.34	810.09	859.41	684.35	1441.94
5.	Hill	733.91	227.63	449.68	936.33	2421.33
6.	U.P.	467.91	500.06	633.80	399.80	905.96

(b) Mandays per unit:

1.	Eastern	111.55	280.53	153.75	345.64	217.12
2.	Central	317.05	290.17	168.71	315.02	232.96
3.	Bundelkhand	226.40	296.56	121.95	332.37	112.44
4.	Western	302.10	303.71	248.01	808.11	200.39
5.	Hill	336.60	984.39	202.29	383.73	123.36
6.	U.P.	263.51	290.07	182.84	447.33	207.77

(c) Value of output per unit:

1.	Eastern	512.51	545.01	630.34	1224.41	947.39
2.	Central	2849.28	972.29	803.62	760.53	3573.86
3.	Bundelkhand	1916.68	635.33	571.63	741.69	597.85
4.	Western	2917.49	1339.96	1379.83	1970.92	865.41
5.	Hill	1232.29	3116.10	709.82	6361.05	1058.87
6.	U.P.	2046.49	830.22	863.72	1460.74	1144.47

TABLE - IV

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Some Ratios relating to the Rural Household Industry
U.P. 1968-69

(a) Productive Capital per Manday:

Sl. No.	Region	All industries	Food Stuffs	Cotton Textiles	Silk Textiles	Misc. Textiles	Wood pdt. mfg.	Leather & leather products
1	2	3	4	5	6	7	8	9
1.	Eastern	3.09	7.93	1.10	1.24	1.46	1.58	1.10
2.	Central	2.93	6.19	0.57	-	1.90	1.56	2.22
3.	Bundelkhand	2.29	3.48	1.49	-	3.45	1.74	1.85
4.	Western	5.50	10.89	3.42	0.46	2.93	2.43	1.84
5.	Hill	4.72	10.13	19.88	-	2.59	2.84	2.22
6.	U.P.	3.99	8.79	2.12	1.22	1.73	1.92	1.78

(b) Value of output per Manday:

1.	Eastern	5.21	11.35	3.33	3.17	2.83	3.13	2.73
2.	Central	6.00	8.94	2.56	-	2.87	4.23	8.99
3.	Bundelkhand	4.29	5.85	3.49	-	3.84	3.15	8.47
4.	Western	12.27	20.98	11.99	12.42	3.14	4.49	9.66
5.	Hill	8.17	21.57	14.82	-	3.44	3.70	3.66
6.	U.P.	8.04	14.86	7.24	3.37	2.92	3.81	0.77

(c) Value added per Manday:

1.	Eastern	2.17	3.30	1.56	1.46	2.16	2.30	1.19
2.	Central	2.77	3.07	1.45	-	2.35	2.25	2.91
3.	Bundelkhand	2.08	1.69	0.77	-	2.53	2.16	3.55
4.	Western	4.08	5.11	4.39	0.12	2.33	3.04	3.45
5.	Hill	3.95	8.10	3.76	-	2.86	2.09	1.78
6.	U.P.	3.00	4.00	2.84	1.43	2.24	2.56	2.79

(d) Value added/capital ratio:

1.	Eastern	0.70	0.42	1.42	1.18	1.48	1.46	1.07
2.	Central	0.94	0.50	2.54	-	1.97	1.44	1.31
3.	Bundelkhand	0.90	0.46	0.51	-	0.73	1.24	1.92
4.	Western	0.74	0.47	1.29	0.25	0.80	1.25	1.87
5.	Hill	0.84	0.80	0.20	-	1.10	0.74	0.80
6.	U.P.	0.75	0.45	1.34	1.17	1.29	1.33	1.57

Some Estimates' relating to the Rural Household Industry
U.P. 1968-69

(a) Productive capital per manday:

Sl. No.	Region	Non-metallic minerals		Basic metals & its pcts.		Transport Equipments		Misc. mfg. industries	
		10	11	11	12	12	13	13	13
1.	Eastern	1.35	3.67		0.85		2.53		
2.	Central	0.99	3.12		1.08		2.13		
3.	Bundelkhand	1.44	3.74		0.87		3.12		
4.	Western	2.67	3.46		0.85		7.16		
5.	Hill	0.23	2.22		2.57		19.63		
6.	U.P.	1.72	3.47		0.89		4.36		
(b) Value of output per manday:									
1.	Eastern	1.94	4.10		3.54		4.36		
2.	Central	3.03	4.76		2.41		15.36		
3.	Bundelkhand	2.14	4.69		2.23		5.32		
4.	Western	4.41	5.56		2.44		4.32		
5.	Hill	3.17	3.51		16.58		8.58		
6.	U.P.	2.86	1.72		3.27		5.51		
(c) Value added per manday:									
1.	Eastern	1.09	2.84		2.97		1.89		
2.	Central	2.04	2.55		1.80		12.38		
3.	Bundelkhand	1.56	3.97		1.83		4.03		
4.	Western	2.24	1.06		1.12		2.57		
5.	Hill	1.39	2.17		9.34		3.76		
6.	U.P.	1.59	3.27		2.27		3.27		
(d) Value added/capital ratio:									
1.	Eastern	0.81	0.77		3.49		0.75		
2.	Central	2.07	0.82		1.67		5.80		
3.	Bundelkhand	1.08	1.06		2.10		1.29		
4.	Western	0.84	1.17		1.32		0.36		
5.	Hill	8.61	0.98		3.64		0.19		
6.	U.P.	0.92	0.94		2.54		0.75		

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